PROPOSED

ELECTRIC RESTRUCTURING

IMPLEMENTATION PROCESS

Submitted By
Public Service Commission of South Carolina
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ELECTRIC RESTRUCTURING PROCESS

The Public Service Commission of South Carolina (the Commission or PSC) was created by the General Assembly to carry out the purposes of Article 9, Section 1, of the State Constitution. Regulation by this Commission in determining just and reasonable rates, standards of quality, measurement and supply has produced an excellent electrical customer and utility environment in South Carolina. Retail rates are below those of neighboring states and are also lower than the national average. Rate levels and the high quality of electrical service are key ingredients in the economic development boon which our state now enjoys. Our utilities are financially sound and investor confidence in them remains high.

Against this backdrop, this past summer, pursuant to a request by the Honorable David H. Wilkins, Speaker of the House of Representatives of South Carolina, this Commission began considering views of interested parties regarding the possibility of future implementation of electric restructuring as proposed in bills pending in the General Assembly. During the course of this evaluation, the Commission solicited and received input from South Carolina utilities, customers, and others. We are very appreciative of all the parties' attempts to provide the Commission with information and views concerning this most serious matter.
Proponents of change maintain that benefits will accrue to customers by subjecting the generation of electricity to market forces instead of regulation, while others argue that utilities likely will retain a monopoly power and that the enormous complexities and complications intrinsic to the industry will require continued regulation to protect the public interest.

Reliable and economical electric service is critical to the well-being of all South Carolina citizens and businesses. It is a service that uniquely affects the public interest.

The fundamental question of whether electric restructuring is in the public interest has not been addressed by this Commission. The only issue which has been addressed is the proposed process which would be used to implement electric restructuring should legislation such as House Bill 3414 and/or Senate Bill 346 or other legislation become law.

The composition of our nation's electric system is one of interconnections and transfers of power. Therefore, measures undertaken by the federal government on the wholesale level and in other states may profoundly affect the entire industry, including that in South Carolina. The Commission recognizes that South Carolina should not follow suit into the unknown merely because of actions taken on the wholesale level and in certain other high cost states. A decision should be based on what is best for the consumers of South Carolina.

There are many issues which would need to be addressed by the General Assembly and resolved positively before the public interest question may be answered. These issues include:

The tax revenue impact to the state, as well as to municipalities and the counties;
How competition will impact prices for small customers, including residential, rural and small commercial customers;
Consumer education needs;
How to ensure reliable, adequate and affordable electricity reserves;
Whether or not stranded costs will be recovered, and if so, in what manner; and,
The cost of developing and buying the technology and information systems necessary to allow customer choice of generation supplier.

Customers normally expect two results from deregulation of any industry. First, they expect reliability/availability of service to be equal to or better than prior to deregulation. Second, customers expect prices to decline. From a reliability perspective, there is a question of who will be willing to construct new power plants in the future. Peak demand reserve capacity of the Southeastern region of the U.S. is being reduced. Without new capacity additions, how will reliability/availability be the same or better? The Commission is aware that merchant plants are presently being planned in other jurisdictions. Also, South Carolina currently has rates approximately 20% below the national average. Assuming recovery of stranded costs, then all customers may not benefit because prices might not decline. Under competition, prices tend to move toward costs.

The obligation to serve should be removed from a generation perspective. If industry can choose their power supplier, then utilities should be able to choose their customers. This will provide some interesting situations going forward, especially when a customer wants to return to its previous system and the supplier has already committed all of its generation resources to other customers.

There may be social implications of deregulation: Demand-side management programs may be a dinosaur, programs currently offered by electric utilities to assist people on fixed incomes or the physically disabled may be limited or disappear, economic development may be hampered due to unwillingness of utilities to provide grants and other assistance, and support of local community projects may be restricted.

It also should be recognized that South Carolina is in an enviable position with regard to the rest of the Nation in the areas of energy costs and economic development. The average cost of electricity in South Carolina is well below the national average. In addition, the electric system in South Carolina, and the Nation as a whole, is the most reliable in the world. 1997 was the third straight year in which economic development set new records with new investments exceeding 5 billion dollars. There was a record number of new businesses in the state which provided a record amount of new capital investments from new businesses in 1997 of 1.4 billion dollars. Existing industries drove 1997's growth with 75% of capital investment (4.1 billion dollars) coming from industry already located within South Carolina.

By developing the implementation process which follows, the Commission makes no finding as to the necessity or advisability of implementing deregulation or restructuring of the industry at this juncture. The Commission cautions that there may be little to gain and much to lose by being on the leading edge of a restructuring movement. There are assumptions which must be evaluated and complexities which must be addressed prior to determining the appropriate course of action. We believe measured steps and careful analysis of existing issues and future developments contribute to an orderly process and will best protect the public interest.

The present electric generation and distribution system is working well. This Commission is honoring the request that has been made of it by developing this implementation process, but in so doing, the Commission remains mindful that there are significant questions that remain about deregulation. It may be helpful to evaluate the results of deregulation in other states before implementing any changes in South Carolina.

It may be helpful if wholesale wheeling is implemented fully and its results evaluated prior to the implementation of any state retail restructuring plan. Recent federal rulings have instigated major changes which have already allowed electric suppliers to lower their power costs. Much work remains to fully implement these changes before knowing if substantive changes at the retail level are also needed.

There may be unique effects that electric industry restructure could have on all electricity suppliers. Some electric suppliers have different structures than other providers; therefore, any restructuring process should make allowances for the different systems that currently exist in South Carolina.

We believe that the public interest would not be served by electric industry restructuring which fails to ensure the continued availability of reliable and reasonably priced electric service to all citizens of the state. We do not believe that South Carolinians would be well served by a restructuring process that may benefit large users of electricity at the expense of smaller users. Additionally, the rural customers of the state should not suffer at the expense of urbanized areas.

Similar to water, electricity is an essential service in today's society. A reliable and affordable source of electricity should always be maintained.

In keeping with the above thoughts, the Commission submits this proposed implementation process. It is a process that the Commission proposes should the Legislature determine that electric restructuring is in the public interest and enacts legislation. It is not a recommendation that electric restructuring take place.

The Commission notes that South Carolina has a mixture of electric suppliers, including investor–owned electric utilities, electric cooperatives, municipal utilities, a joint action agency (Piedmont Municipal Power Agency) and the state–owned South Carolina Public Service Authority (Santee Cooper). With the exception of some limited territorial

aspects concerning electric cooperatives and municipalities, the Commission's regulatory responsibility is limited to the investor–owned electric utilities.

Therefore, the Commission has no real familiarity with the electric cooperatives, municipal utilities, the Piedmont Municipal Power Agency (PMPA), or Santee Cooper. These entities have unique legal structures, financial operations, accounting principles, and operational restrictions under which these organizations function. As an example, Santee Cooper, in its submission to the Commission, identified the apparent legal conflict between bonds it had issued under the authority of the General Assembly with any ability of this Commission to set or approve its rates. Although we did not reach a decision with respect to that conflict, it is clear that there are many legal and public policy issues surrounding public power in which we have no experience.

We are mindful of the interest that some Members of the General Assembly have in regard to whether the electric suppliers other than investor-owned utilities should be subject to restructuring. Nevertheless, we do not believe we have the information necessary to address either the issue of which suppliers to include in a restructured electric industry or what changes would be necessary to these electric suppliers should they be found to be subject to restructuring. Thus, after a thorough consideration of the questions raised regarding public power, we have concluded that these legal and policy issues are better left to the General Assembly for determination.

However, the process submitted would be used to implement electric restructure in regard to any suppliers which the General Assembly decides would be subject to restructuring. That is, if only investor-owned utilities are subject to the restructuring as proposed in the House bill, then the process would be utilized to implement restructuring as to those suppliers. If a process similar to the Senate bill were passed, then the proposed implementation would be utilized for the other included suppliers as well.

EXECUTIVE SUMMARY

The proposed process provides for the deregulation of electric generation but allows for PSC regulation of distribution services and any portion of transmission services subject to its jurisdiction. The following is a summary of the basic components of the proposed process:

1. Open access to certified suppliers (generators, aggregators, power marketers, and others that supply electricity to the electric system) by electric consumers of South Carolina electing to utilize their right to customer choice as part of generation competition.
2. Open access to the transmission and distribution systems of host utilities by all certified suppliers.
3. Unbundling of host utilities' generation, transmission and distribution functions (functional unbundling) with separate books and records and affiliate transaction rules established by the PSC. The generation function will become competitive if provided by the General Assembly.

4. Unbundling of host utilities' distribution services and rates as appropriate over time.
5. Market determination of supply prices for electric customers under the market structure established for electric restructuring.
6. Under the market structure of the process, suppliers can enter into bilateral contracts with customers who choose a contractual arrangement. The need for a Power Exchange (PX) that allows for bilateral contracts should be determined. The PX could be incorporated into the independent system operator (ISO) functions.
7. An ISO should be established on a regional basis whenever this is feasible. It is preferable to have a regional ISO in place prior to the establishment of electric restructuring in the state. However, electric restructuring on a state basis can be implemented without an ISO being in place. This would require the use of the Federal Energy Regulatory Commission's (FERC's) open access tariff rates for each utility along with certain rules and procedures approved by the PSC to ensure that the objectives of electric restructuring are achieved. Whenever and however an ISO is implemented, the ISO should serve to coordinate electricity supply with demand so that host utilities can provide electricity to meet the needs of customers.
8. The distribution utility, defined as the host utility participating in the process, will obtain power from suppliers to serve customers who do not choose a supplier, as well as customers with emergency needs related to supplier shortcomings (default service). The distribution utility is responsible for connecting customers to the electric system and maintains its previously authorized service territory for transmission and distribution functions.
9. The establishment of a PX may facilitate the implementation of default service by providing a readily available forum for emergency power at visible prices.
10. If permitted by the General Assembly, utilities may recover verifiable stranded costs over a reasonable time period beginning with the implementation of restructuring.
11. Customer service functions, such as metering and billing, will initially remain under the jurisdiction of the PSC and will remain bundled in customer rates. However, customer service functions may be unbundled in the future if sufficient consumer demand and competitive markets develop.
12. Consumer education and consumer protections are important components of the electric restructuring process and must be in place prior to the implementation of the process.
13. The PSC defers to the General Assembly the determination of the various participants for the electric restructuring process within the state.
14. Each participating utility should file an electric restructuring process with the PSC.
15. The obligation to provide generation services for existing host utilities participating in the process is removed.

INTRODUCTION

This process seeks to provide the means to address many complex issues of electric restructuring in a reasonable and workable manner. Numerous potential solutions for each issue exist, but there is not one clearly right or wrong action for most issues. This process cannot ensure that customers will receive rate reductions or that system reliability will remain at its existing level or improve. This process relies on each utility to determine, based on market conditions, how best to provide reserves necessary to meet consumer needs. After the deregulation of generation, the process depends on the market for the supply needs of customers.

It is important to utilize an orderly planning process which is flexible and dynamic and which allows for modifications as technology changes and as consumer perceptions and demands change. Many of the details of the electric restructuring process can only be resolved over time. The PSC must monitor the outcomes of the process from the initial transition period prior to full implementation and after full implementation, and make modifications to the process as necessary to achieve the desired outcomes of electric restructuring. Once certain steps are implemented in the restructuring process, such as unbundling, it will be very difficult or impossible to undo such actions. Therefore, it is imperative to ensure the opportunity to evaluate and address important issues before full implementation so as to minimize the chance of irrevocable error.

PROCESS IMPLEMENTATION

Following passage of legislation, the process allows for a five year transition period prior to full implementation. The transition and the implementation processes should be modified to allow for any litigation which might arise regarding restructuring. A transition period is necessary to provide for interim modifications and adjustments, to ensure that the market is working competitively, and to evaluate whether the electric restructuring process is proceeding as anticipated. A transition period prior to the introduction of full competition allows for various issues to be addressed. The initial two years of the transition period prior to the phase–in allows for the consideration of the following:

1. The development of a regional ISO process and/or the establishment on an interim basis of an in–state process to carry out the functions of transmission.
2. The development, examination, and implementation of utility–specific restructuring processes.
3. The identification and evaluation of utility stranded costs.
4. The examination of consumer support programs.
5. The development and implementation of customer education to increase awareness and understanding of the implications of restructuring.
6. The evaluation of potential market power issues under existing federal and state laws.
7. The examination of the necessity, desirability, and feasibility of incorporating new technologies for system operations and other areas.
8. The evaluation of tax issues and stranded cost issues.

9. The identification and resolution, to the extent possible, of federal and state jurisdictional issues.
10. The development of a consumer protection process.

The process provides for implementation of the initial phase-in period two years after passage of state legislation. Implementation will consist of a phase–in of customer choice for three years after the initial two–year period. Year one of the phase–in allows 20% of the peak load derived for a base period of each participating host utility to be subject to competition and customer choice. In year two of the phase–in, an additional 20%, or a total of 40%, of each utility's peak load will be subject to competition. In year three of the phase–in, an additional 20% of peak load would be included for a total of 60%. The implementation process must allow residential and small customers sufficient opportunity to participate in the process. The phase–in process could be modified by the PSC should conditions warrant such action. The load subject to competition will be applicable to all customer classes each year with the residential class having first priority on a first-come first-serve basis. However, it must be realized that it will probably take the utilities more time to connect residential customers scattered across their systems than individual large commercial and industrial customers. The commercial class will have second choice, and any remaining load will be allocated to the industrial class. Under this process, the customer must first notify the host utility of the intent to participate. If the customer does not have a supplier at the time of notification, a specific time period should be established for the customer to obtain a supplier. The customer must have a certified supplier to participate in the process, and failure to obtain a supplier by a given time disqualifies that customer. Following the third year of phase–in, full implementation will take place across the state with 100% of load being subject to competition for all customer classes. A consumer education process would begin as soon as six months after passage of legislation and no later than six months prior to beginning the phase–in. The consumer education process should continue through the phase–in and the initial years of full implementation. The PSC shall have the responsibility for developing an educational process and coordinating the educational function with various entities as appropriate.

During the five–year transitional period, various proceedings will need to be conducted by the PSC, the legislature, and other state agencies. These proceedings could include the following:

Proceedings to assess the development and implementation of a market structure on the basis of a regional ISO. This proceeding could address how to involve other states in the ISO. Such a proceeding would consider the resolution of technical and administrative issues necessary for the establishment and operation of a regional ISO, as well as consider an interim process should it not be feasible to establish a regional ISO by the time of the phase–in or full implementation of customer choice. The proceeding would address the possible formation of a pool and the possible inclusion of a PX.

Proceedings to address the issue of stranded costs. These proceedings would determine the initial estimate of the allowed level of stranded costs for each utility.

Proceedings by the PSC regarding the restructuring process of the utilities. These proceedings would consider unbundling proposals for organizational and service purposes; cost studies related to unbundled services; determination of new rates for unbundled services; codes of conduct for affiliates and marketers of competitive services; standards for fair competition; and other issues necessary to comply with the restructuring process.

Proceedings by appropriate state agencies to evaluate and address the potential tax impacts of electric restructuring on state revenues.

Proceedings to consider the need for customer assistance programs.

Proceedings to address the modification of PSC rules and procedures to comply with the process of electric restructuring.

Proceedings to address reciprocity and public power stranded cost issues.

Proceedings to determine the extent of participation in the electric restructuring process.

The process would encourage the use of working groups consisting of the various entities, with the goal of addressing outstanding issues while also providing for flexibility in dealing with issues within a dynamic framework.

COMPONENTS OF THE PROCESS

1. Host utilities participating in the process shall be unbundled on a functional basis with adequate safeguards established by the PSC to eliminate the potential for unfair and/or inappropriate dealings between competitive and regulated affiliates.
2. The generation function of the participating utilities shall be deregulated subject to the criteria established within this process and shall be subject to competition. All customers of participating utilities shall have the right of customer choice from alternative suppliers of electricity.
3. Transmission and distribution functions shall remain under regulations established by FERC and the PSC.
4. The PSC shall regulate all distribution functions for each utility below a certain demarcation point. The separation point between transmission and distribution is a jurisdictional issue, which must be resolved through state and federal cooperation.
5. Distribution utilities will be subject to regulation by the PSC.
6. Nuclear power plants shall not have a must-run status under a fully competitive generation scenario. Given the significance of nuclear energy within the state, it is important to provide certain safeguards for the existing nuclear units. Maintaining nuclear units under PSC regulation is one option. For instance, the actual level of future nuclear decommissioning costs is very uncertain. Additionally, determinations by the Nuclear Regulatory Commission may create changes in the regulations which result in changes in costs for nuclear plants. The PSC could review any additional decommissioning costs placed upon the host utilities of the state and provide for a recovery of such costs as deemed appropriate relative to the life of the nuclear plant. However, should the Nuclear Regulatory Commission determine that nuclear plants should remain regulated,

the Nuclear Regulatory Commission's decision would need to be incorporated within this process.

7. Customers who decide not to exercise their option of customer choice and select an alternative supplier and therefore elect not to participate in the competitive process will continue to receive bundled basic service (which could actually be rebundled service subject to revised cost studies) from the host utilities.
8. Suppliers that participate must obtain certification from the PSC and comply with relevant PSC procedures. The PSC will establish standards for suppliers of all aspects of electric generation and will seek to protect the reliability and adequacy of service as well as protect the consumers of the state.
9. If permitted by the General Assembly, utilities will be allowed to recover reasonable, verifiable stranded costs in accordance with procedures outlined within this process and established by the General Assembly.
10. The details of the issue of reciprocity as determined by the General Assembly can be implemented by the PSC.
11. To provide for reliability during the initial phase–in of the process, the host utility should provide reserve capacity and other necessary related functions to protect non–participating customers. Reliability issues can be further addressed and defined within the hearing concerning the establishment of an ISO function and during the PSC's hearing on electric restructuring. Ultimately, market forces should determine the level of reserves to maintain and protect the system. However, market forces provide no guarantee regarding reliability.
12. Customers, at least during the initial implementation process, should not be allowed to change suppliers more frequently than every 90 days unless the customer's supplier fails to meet its obligations or as a result of other events, as determined by the PSC, which necessitate a change.
13. A Power Exchange (PX) is not required by this process but should be considered during the proceeding addressing the regional ISO. The PX mechanism can provide pricing data useful to consumers, enhance market accessibility for small customers and provide assurance of generation capacity, but could create an additional layer of bureaucracy to the process.
14. Utility affiliates should be subject to a code of conduct approved by the PSC.
15. Marketers and suppliers should be subject to a code of conduct approved by the PSC.
16. The metering function should initially be regulated by the PSC and be administered through the distribution company. As competition for metering services develops, these services could be offered as unbundled competitive services through alternative suppliers. Customers with usage greater than a certain level determined by the PSC should be required to acquire a real-time meter at the customers' expense or through support from their supplier. Customers with usage below the predetermined level would be allowed to use a regular meter or use a load profile developed by the distribution company for the class of customers appropriate for that customer. Customers not electing to participate and wishing to keep bundled service should be allowed to use existing meters as long as the existing meters are appropriate. Customers desiring real–time meters have the responsibility of funding such meters, but could receive

assistance from their supplier. Meter replacement must be coordinated with the distribution company to ensure that the meter meets technical and safety standards, that it is installed properly, and that the meter can be properly tested. The use of load profiles should be evaluated after the transition period to evaluate their effectiveness.

17. The billing process shall allow for two separate bills, as appropriate. The distribution company shall bill for transmission and distribution services, while the supplier bills for the supply functions provided to the customer. Customers wishing to receive only one bill but having an alternative supplier would be able to receive one bill if they so requested and such a requirement is amenable to the supplier and the distributor.

18. The distribution company will serve as coordinator of consumer issues and consumer complaints between the customer, service providers, and the PSC. For example, when a customer makes no payment to the distribution company for the electric services provided by that company, the distribution service provider will notify the customer's other service providers and begin late payment procedures in accordance with regulations set by the PSC. The customer's service providers must continue to provide service until either disconnection occurs or the customer makes appropriate payment. When a customer does not pay the supplier of his/her generation services, but does pay the distribution service provider for distribution and transmission services, the generation supplier must notify the distribution service provider within a reasonable time period. The distribution service provider will initiate late payment procedures in accordance with PSC procedures unless it is determined by the PSC that alternate procedures should be employed. Service providers must continue to provide services through the late payment process. Under this concept, when a customer experiences some form of service problem or complaint, the customer should inform the distribution company, which will evaluate the matter regarding the parties to be notified, and forward the information to the proper entity such as the PSC, the supplier, or the distribution company complaint department. Information should flow through the distribution company from the customer and from the supplier. The distribution companies will serve as a clearinghouse for consumer issues. One exception would be billing complaints against a supplier. The above provides an illustration of how this process might work, but the specific details of this process should be determined within the proceeding by the PSC regarding the electric restructuring process of the utilities.

19. The host utilities participating in the process will maintain their existing territorial assignments for transmission and distribution purposes and provide the distribution function.

20. Customers that do not elect an alternative generation supplier and those that experience supplier power delivery failures will obtain services from a default service provider. The default service provider initially will be the host utility, which is the distribution company that provides distribution service to that customer. The default service provider will be responsible for providing bundled service to customers that do not select an alternate generation service provider. Under the default service function, the generation provided to the customer will

be market based and will be obtained through a PX or a bidding process or as wholesale purchases. During the transition period, the Commission could review rates charged default customers. The default provider will provide emergency service for a customer should the customer's supplier fail to deliver. The default service function, which is to be provided initially by the distribution company, could be subject to competition following the period of transition and a determination by the PSC that default service should be competitive. The PSC's electric restructuring proceeding should consider the mechanism for informing the distribution company in a timely manner of the number of default customers and of the number of emergency customers for which the distribution company could be responsible. End–user rates must be designed to allow for cost recovery of the default services provided by the distribution company.

21. The PSC will establish a consumer education process and consumer protection process and will begin implementation prior to the commencement of electric restructuring.

22. The market structure for electric restructuring should be based on the concept of a regional ISO process for coordinating supply and demand. However, electric restructuring can be established on a state basis without having an ISO in place. During the transition period, electric restructuring can proceed without an ISO should it not be possible to establish one, but it is advisable to utilize a regional ISO when such a process becomes feasible. Additionally, any market structure arrangement must allow for the use of bilateral contracts between customers and suppliers.

23. A distribution utility must provide access to its distribution services based on nondiscriminatory rates, terms, and conditions.

24. As part of the electric restructuring process and as part of the utility's restructuring plan, each utility must file with the PSC the utility's process for unbundling of services, along with the rates and costs for the unbundled services offered.

25. The PSC defers to the General Assembly:

    The development of any necessary electric restructuring legislation addressing stranded cost recovery;

    Modifications of PSC regulations as necessary and applicable to any participants that are not currently under its jurisdiction;

    Modification of the existing obligation to serve with the obligation to connect for host utilities;

    Revisions of laws regarding the regulations of the PSC;

    The determination of the extent of participation by the suppliers of the state;

    The determination concerning reciprocity; and

    A determination regarding state tax law changes.

26. The PSC will need to modify its existing rules and procedures to meet the requirements of electric restructuring. The ability to fine and revoke certification of those entities found guilty of violating PSC rules and procedures should be

included in the PSC's modified rules and procedures. This should be done consistent with procedures developed by the General Assembly.

27. The PSC proceeding on electric restructuring must consider the issue of reliability under electric restructuring and establish a process for the maintenance and improvement of reliability.

SPECIFIC ISSUES

1. Stranded Costs:

Discussion:

Stranded costs are determined on the basis of generation–related (or supply–related) investments, costs, and expenses which were incurred by an electric utility during the period it was regulated and required to provide service within an assigned territory, but are investments and costs which would not be recoverable under a competitive electric industry structure. Under a regulatory environment, such investments and expenses would be recoverable by an electric utility through rates approved by a state commission using the traditional embedded cost methodology. The regulator, under traditional regulation, has the option of placing some of these generation costs in rates immediately or of deferring such costs into the future, depending on the rate level that the regulator determines to be appropriate during a rate case proceeding. Competition, on the other hand, determines rates or prices on the basis of market forces rather than on the embedded cost methodology employed under regulation, and these market–determined rates could be either above or below the embedded cost rates allowed by regulators. Market prices below embedded rates would result in stranded assets or costs for a utility because the utility would not be able to sell electricity generated through such assets at its higher embedded cost based price. In summary, competition serves to strand higher cost generation assets because the energy produced by the utility from such higher cost facilities cannot be sold on the market at a profitable rate.

Stranded costs are often categorized in the following manner:

A. Generation facilities of a utility which provide electricity at embedded costs or rates above the expected future market values;

B. Deferred costs for regulatory assets (items which are given different accounting treatment under regulation than prescribed for nonregulated industries, or which do not occur within nonregulated industries and are thus regulatory specific items) related to generation or supply. Examples include, but are not limited to, deferred debt refinancing costs which were used to provide lower cost debt funding for the development of generation capacity, and deferred DSM (demand–side management) costs used to mitigate future peak and energy supply demands on a utility's system; and

C. Non–utility generation purchases by a utility as required by federal legislation, such as the Public Utility Regulatory Policies Act (PURPA), which are above market prices.

The utilities feel that the failure to recover their full stranded costs is a violation of the regulatory compact, which is the traditional compact between regulator and utility where the utility did what was necessary to provide service within its assigned service territory, while the regulator oversaw the actions of the utility and provided for rate recovery and a return for the fulfillment of this responsibility.

Proposed Implementation :

1. If directed by the General Assembly, the PSC would conduct a proceeding to address the issue of stranded costs. Such a proceeding would address the level of stranded costs to be recovered by each utility and the appropriate time period for recovery by that specific utility consistent with the guidelines set forth by the General Assembly in this process. The proceeding could also consider the issue of the future mitigation of stranded costs by the utility. Mitigation should focus on increased efficiencies rather than cost shifting. The utilities will file a stranded cost recovery plan with the PSC for approval. This approach includes both low–cost and high–cost generation facilities.

   The issues arising from electric restructuring, which must be addressed concerning stranded costs, include:

   the definition of stranded costs;
   the components of stranded costs;
   the estimation of the size of stranded costs for each utility and for the state;
   the determination of whether to allow full or partial recovery;
   the role of mitigation in minimizing stranded costs;
   the recovery mechanism to be employed and the time period for recovery;
   the true–up mechanism to be followed.

2. This process sets forth the following criteria for the consideration of stranded costs. It is the burden of each utility to justify the magnitude of its stranded costs estimate. Stranded costs can be defined as the verifiable investments and commitments, in costs and expenses, not yet recovered by utilities and unlikely to be recovered in a competitive market. Investments and costs unrelated to competition should not be included for recovery. Estimating stranded costs on the basis of a revenue requirements approach is a reasonable option.

   A. The composition of stranded costs includes:

      regulatory assets or deferred costs, such as deferred DSM costs, deferred bond refinancing premiums, and DOE clean–up funds for nuclear facilities;
      non–utility generation (NUG) purchases above market rates;
      generation facilities that provide power at above market rates; and

reasonable values for the fixed cost of nuclear plants, such as nuclear decommissioning.

Stranded costs should be recoverable through a non–bypassable stranded cost charge referred to as a Competitive Transition Charge (CTC) which shall be levied on the bills of all retail customers. Whenever a customer acquires electricity directly from a supplier and bypasses the transmission and distribution system of a utility, arrangements must be developed between the customer, customer's supplier, and the utility which allows the customer to pay the CTC or that customer's appropriate share of the stranded costs. A period not to exceed ten years for the recovery of stranded costs, beginning with the implementation of restructuring, is a reasonable time frame. The time period allowed for recovery should be a function of the size of the stranded costs estimate for each utility. At the end of the phase–in period, the PSC will conduct a true–up proceeding to re-evaluate the appropriate level of stranded costs. This proceeding should reflect events subsequent to the initial hearing and will provide a stranded costs estimate to be used for the initial year of full implementation. Thereafter, true–up hearings regarding stranded costs will be held annually, or as determined by the PSC, until the time period of recovery has elapsed or stranded costs have been recovered.

B. Stranded costs recovery will begin at the time of the phase–in for those customers exercising customer choice. Other customers continue at existing rate levels.

2. Billing and Metering

Discussion:

Billing and metering issues are customer service related matters associated with maintaining a customer's account. Under an electric restructuring process which provides for the unbundling of various customer service functions, billing and metering are important issues. Many of the parties seeking to become new participants under competition believe that billing and metering should be provided on a competitive basis with suppliers, marketers, and other entities, in addition to the distribution company, being able to provide metering and billing services to end–users. New entrants feel that they must optimize or increase customer interface to develop a competitive industry structure. The utilities tend to support a concept of placing the responsibility of these functions, especially metering, in the hands of the distribution company. Utilities tend to argue that meters, and the metering function, are critical to the safe and reliable operation of an electric system and need to be regulated by the PSC through the distribution utility. Thus, the distribution utilities propose that they should be responsible for acquiring, owning, operating, installing, maintaining, and testing all meters.

The billing function may be carried out in several ways. The suppliers, transmission entities, and the distribution company could send separate bills to customers for generation, transmission, and distribution services. There could be combination–billing services where the distribution company bills for both transmission and distribution

services. The option should exist for the customer to obtain only one bill in those instances when the service providers allow it. For example, a customer obtaining all services from the original host utility might be able to receive one bill, if requested. There are billing related issues such as non–payment or partial payment and billing verification which make this a very complex issue when several billing options are available to customers. The issues of who is to collect bill payments, how payments are to be disbursed among service providers, partial payment, and non–payment must be addressed. It is necessary to establish procedures for communicating billing information between the service providers, customers, and the PSC so that customer problems and customer complaints can be effectively addressed.

The distribution service provider is in the position to function as a intermediary in providing customer–related information from the customer to other parties. This would be especially true should the distribution utility provide much of the billing and metering functions for the end–user. Customer service, non–payment, and customer complaint information could be provided through the distribution service provider to customers, the PSC, and other service providers.

Proper control of metering data is critical to ensure that the billing function is carried out adequately. Real–time meters providing hourly usage determinations can produce data necessary to balance the demand and supply of energy on an electric system. Energy costs within a competitive market could vary hourly throughout the day as a function of availability, cost to generate, demand, and transmission constraints. According to certain utilities, real time meters are currently expensive, especially when purchased individually, and the issue arises as to who should be responsible for paying for such meters under a competitive industry structure. Others state that the real–time meters are not expensive. The price of real–time meters is expected to decline in the future as the need for such meters is realized and as technology is devised to provide the desired service.

Proposed Implementation:

The metering and billing functions should initially be under the regulation of the PSC and administered through the distribution company who will acquire, own, install, operate, test and maintain all meters. These costs will be incorporated into rates regulated by the PSC. As competition for these services develops, they could be offered as unbundled competitive services through alternative suppliers. Any customer desiring a real–time meter is responsible for funding such a meter but could receive assistance from the supplier. However, meter replacement must be coordinated with the distribution company to ensure that the meter meets technical and safety standards and that it is installed properly. The billing process shall allow for two separate bills as appropriate. Load profiling will be used for customers who do not wish to purchase a real–time meter. The distribution company shall bill for transmission and distribution services, while the supplier bills for the supply functions. Customers having an alternative supplier but wishing to receive only one bill will be able to receive one bill if they so request and such a requirement is amenable to the supplier and the distributor.

3. Default Provisions:

Discussion:

Customers that do not select an alternative generation supplier will obtain services from a default service provider. In addition, the default service provider can be designated to provide emergency service for customers should the customer's supplier fail to deliver. Through the default provisions, customers that do not wish to exercise their customer choice option are protected, as well as those customers that do not make wise customer choice decisions. Customers that choose suppliers that fail to deliver reliable service will have power but must pay market rates. The distribution service provider can carry out the role of the default service provider or the function could be deregulated over time and performed on a competitive basis by other entities with customers assigned arbitrarily to different providers. The distribution company is in a position to provide this default function under competition because it has a duty to connect new and existing customers to the electric system even though it no longer has the historical responsibility given it under the regulatory compact of providing service for every customer within its assigned territory. Customers not choosing a new supplier can continue to get service through the incumbent service provider or utility and could continue to receive bundled service similar to service received prior to restructuring. Under the concept of competition, market forces will presumably provide for the development of supply to meet future increased demands.

Proposed Implementation:

Customers that do not elect an alternative generation supplier, as well as those that experience supplier power delivery failures and require emergency service, will obtain these default services from a default provider. The default service provider will be the host utility, the distribution company that provides distribution service to that customer. The default service function, which is to be provided initially by the distribution company, could be subject to competition following the period of transition and a determination by the PSC. Rates must be designed to allow for cost recovery by the distribution company for default services. Emergency default service is very difficult to anticipate and to plan for because it reflects such uncertainty. It is important that rules and procedures be established which clearly set forth the responsibilities of all the parties. The loss of power from an individual supplier might be spontaneous, but energy will continue to flow through the system to the impacted customers for some time after the customer's supplier has failed. It is imperative to have a channel of communications established so that the default provider can be notified of a supplier's failure as soon as possible.

The incumbent distribution utility is obligated to use a *reasonable effort* attempt to procure electricity at market prices for default customers. The availability and price of generation to meet the demands of default customers is to be determined in the competitive generation market. It is possible that sufficient generation, at certain times, may not be available to meet all the electricity demands of default customers. If sufficient

generation cannot be procured to meet all of the electricity demands of these customers, a curtailment process would need to be implemented. The default provider could utilize a PX to meet the energy needs of its users, as practicable.

The following is an example of how a default function could work. Under a procurement process which includes the incorporation of both a PX and an ISO, the incumbent distribution utility (the default provider) would notify the regional ISO of the amount of generation needed to meet the demands of default customers. The ISO goes to the PX for this generation. If sufficient generation is available in the PX, the ISO utilizes this generation to supply the default customers. The market price for this generation from the PX is the highest generation price bid into the PX for the generation needed to meet the demands of the default customers for a given time period. The default customer is charged the market price for generation along with transmission and distribution charges, plus an adder to cover the costs of coordinating this service. If the generation bid into the PX is insufficient to meet all the demands of default customers, the ISO will ask for more generation to be bid. If the generation bid into the PX is still insufficient, a curtailment process would be initiated by the ISO. Another alternative is for the ISO to establish reserve levels and bid for those reserves in order to ensure generation capacity.

4. Environmental Issues:

Discussion:

A competitive electric industry could have significant impacts on certain environmental issues. Compliance with federal and state environmental legislation will be maintained through any electric restructuring process. Environmental issues regarding power production, like the 1990 Clean Air Act, and environmental permitting procedures are in place. An environmental issue arises concerning the use of renewable energy resources. Most utilities oppose additional legislation or regulation encouraging the use of renewable resources for electric generation and resulting in subsidies or uneconomic costs being levied on electric consumers. Renewable energy resources must be priced on a competitive basis like other supply–side resources. The requirements of a specific fuel mix or price supports for renewable energy resources are generally inconsistent with the concept of competition.

Some suppliers are now offering what is referred to as *green power* to consumers. This is energy that has been generated through environmentally friendly sources such as wind, water, etc. Since electrons cannot be directed to flow in a specific manner through the electric system, a consumer cannot be certain that any energy actually consumed comes directly from a green power source even though green power can be viewed as displacing the need for generation of energy from other sources which could be less environmentally friendly. Certain parties have also proposed a portfolio concept for environmentally friendly generation. This approach would require an electric system or pool to obtain a certain percentage of its power from specific energy resources such as renewables. Utilities argue that this concept is also inconsistent with competition, which is presumed to allow the market to set prices on the basis of competitive factors rather than social determinations. To the extent possible, environmental issues can be addressed through

the established procedures of environmental regulators and not become a part of electric restructuring.

Proposed Implementation:

No additional environmental requirements should be placed on the planning process such as the requirement of the use of green power or a required supply portfolio.

5. *Tax Issues:*

Discussion:

Electric restructuring could reduce the amount of tax revenues collected within a given state unless existing tax laws are amended. A reduction in the price of generation, reductions in property values, and increased sales by non–taxed entities outside of the state could result in lower tax revenues being collected. For certain generating facilities, the open market may cause these facilities to be uneconomical, thereby drastically reducing or eliminating these sources of tax revenues for a given region. Also, out–of–state electric suppliers may not be subject to taxation under current state tax laws.
Applicable sales and local taxes are dependent on the price of electricity and the ability of the state to tax the seller. Sales taxes are currently collected from a single source, the regulated utility. Under generation competition, sales taxes must be collected from numerous electric energy suppliers as well as the distribution service provider. Income taxes could also be affected, as the profitability of a supplier is subject to competition. Suppliers with less profitability will provide less income tax revenues.

Tax reform legislation is necessary to protect state and local revenues. Such legislation should be made after careful study through state entities, such as the Department of Revenue, and should provide revenue neutrality for state and local jurisdictions. Reforms should consider the appropriate point of taxation such as consumption, sale, or generation. Taxes might be set on electric consumption by the end–users to ensure protection of state and local tax bases while not impacting the competitive supply price.

Proposed Implementation:

The implications of the various tax issues are very significant and must be evaluated. The PSC defers the consideration of these issues to the General Assembly and appropriate state agencies, such as the Department of Revenue.

6. Customer Education:

Discussion:

The special importance of electric service makes it urgent to educate customers about the conditions expected to exist under a competitive electric industry environment. With the advent of numerous suppliers, customers will need to be informed about protecting

themselves from fraud and delivery risks along with understanding customer choice. For competition to work, it is necessary that consumers have ready access to accurate information concerning price, quality and terms of services. In the electric industry there is little precedent regarding either access or use of price and quality information by most customers. Electric customers are generally unaccustomed to searching for or interpreting such information. Information is of no use to consumers if they do not understand the information or cannot interpret it.

A customer education program needs to be developed to ensure that the education process protects consumers rather than simply providing marketing opportunities for competitors. The education process should seek to minimize consumer confusion over changes within the industry and develop strategies to educate consumers about the benefits and risks associated with an emerging electric market. Such a process must promote increased awareness of the respective roles of the energy providers, marketers, and aggregators, as well as provide information for consumer protection. It should at a minimum address the topics of:

Information about the electric industry and competition;
Procedures for switching suppliers;
Transmission and distribution company obligations and functions;
Services available to consumers;
Procedures for dispute resolution with all entities associated with the production and delivery of electricity;
Pricing (pricing mechanisms can redistribute costs for distribution and transmission facilities).
Consumer rights.

A consumer education process must address the logic and purpose of deregulation and competition, consumer concerns about the changes taking place, and the mechanics that consumers need to grasp concerning the workings of competition. Adequate funding and support must be made available for the education process, which should be in place prior to the transition to competition and for some period following full implementation. Electric pilot programs have concluded that consumer education is necessary and vital to the success of any electric restructuring process.

Proposed Implementation:

A consumer education process should be established and placed under the direction of the PSC but should incorporate outside sources in the process. The education process should commence at least six months prior to restructuring and continue after full implementation. The PSC could employ outside experts to develop and assist in the implementation of the educational process. In addition, the utilities must play a significant role in the consumer education process through procedures and concepts approved by the PSC.

7. Slamming:

Discussion:

The term *slamming* is used in the telephone industry and is sometimes applied in a general way to other industries. The concept has also been referred to as *zapping* when applied to the electric industry. Slamming or zapping refers to instances within a competitive market where a customer's service provider has been changed without the customer's knowledge or authorization. The customer generally learns of the change when he receives his bill. Slamming has been a serious problem within the telephone industry, resulting in numerous customer complaints which often prove to be very difficult to resolve. Telephone service suppliers, or resellers, are generally headquartered out of state and frequently employ marketers and billing agents, thereby making it difficult to trace the source of the slamming problem. The problem of zapping needs to be addressed for electric restructuring through a clearly established certification process with specific criteria for all suppliers, marketers, aggregators, etc., and their agents. In–state facilities or representatives, bond requirements, and information on processing consumer complaints filed as part of the certification process are only a few examples of means which might be employed to assist in addressing this issue. Some states provide their regulatory authority with the ability to fine and suspend those entities found guilty of slamming. The parties could be required to file procedures as part of a proceeding to establish a full set of criteria to address zapping by the regulatory authority. It is essential that the procedures for addressing zapping be in place prior to the implementation of electric restructuring.

In the telephone industry, criteria for the verification of a customer's switch to an alternative service provider, such as written confirmation or the use of certain electronic procedures which require verification by an independent third party, have been employed in an effort to control slamming. These criteria have been only partially successful, however. Marketers, sometimes through the use of deceptive practices, have been a big contributor to slamming in the telephone industry as the marketers function as agents for the service providers. Thus, the actions of the agents of suppliers should be clearly defined to minimize the opportunity for zapping in the electric industry. In the telephone industry, the local telephone companies, which would correspond to the role of the distribution company in the electric industry, utilize a process referred to as a *freeze* on a customer's current service provider. The freeze can only be lifted and the customer's service provider changed when a written authorization is provided to the local company.

Proposed Implementation:

The PSC should have the authority to fine and revoke the certification of those entities found guilty of zapping electric customers. Guidelines must be established by the PSC for marketers and suppliers to follow. PSC rules and procedures must be in place to clearly define the regulatory process for addressing zapping violations.

8. Time Frame for Implementation:

Discussion:

The implementation of electric restructuring will need to incorporate a time period to allow for the transition from monopoly regulation to competition within the electric industry. A transition period is necessary to provide for interim modifications and adjustments to ensure that the market is working competitively and to evaluate whether the electric restructuring process is working as expected. It would be technically impossible to move from a monopoly electric industry to a fully competitive industry immediately upon the passage of legislation. A transition period prior to the implementation of full competition allows for:

1. The development, examination, and implementation of utility–specific restructuring processes, including the functional unbundling of generation, transmission, and distribution as well as the unbundling of specific services which are demanded by consumers and which can be competitive in the future, such as billing and metering services.
2. The identification and evaluation of utility stranded costs.
3. The examination of consumer support programs.
4. The development and implementation of customer education to increase awareness and understanding of the implications of restructuring.
5. The evaluation and formulation of mechanisms to protect against potential market power.
6. The development of the proper market structure, such as the use of a (PX) Power Exchange for supply and pricing information, combined with an (ISO) Independent System Operator to handle transmission functions and match system supply and demand; the use of an ISO without a PX; the allowance for bilateral contracts and a pool process within the market structure; and the use of the individual utility transmission functions without an ISO or PX/ISO.
7. The examination of the necessity, desirability, and feasibility of incorporating new technologies for system operations and other areas.
8. The evaluation of tax issues and stranded costs issues to the extent deemed appropriate by the General Assembly for the electric restructuring process.
9. The identification and resolution, to the extent possible, of federal and state jurisdictional issues.
10. The development of a consumer protection process.

Parties have recommended that following the passage of legislation for the implementation of electric restructuring, a transition period should include a phase–in approach. Other states appear to be proposing transition periods from two to five years. Phase–in allows for the implementation of restructuring over time with a certain percentage of a utility's load being opened to competition and customer choice each year. Phase–in allows the issues identified above to be addressed and considered on the basis of some actual experience. Electric restructuring involves making modifications to many technical and complex factors, and the consequences of these changes can only be anticipated without actual experience. Therefore, some parties feel that it is necessary to allow for a transition process to evaluate the evolution of the outcomes of competition.

The transition period would also allow for litigation, which would probably result from any restructuring process. Even some of those parties who strongly support competition allow for a transition period for full customer choice. Proposed federal legislation recognizes that a transition period is necessary for the full implementation of competition.

In summary, a transition period is generally recognized as both appropriate and necessary for implementing any electric restructuring process. The time period recommended for the transition generally ranges from two to five years. Those parties pushing strongly for competition generally recommend the lower end of the range, while those entities which have a more conservative view recommend the upper end of the range as more appropriate. A review of other states' procedures tends to produce time periods from the middle to the upper end of the range for a transition period following legislation.

Proposed Implementation:

A transition period of five years is proposed for the full implementation of an electric restructuring plan. Two years following the passage of legislation, a three–year phase–in should commence allowing for 20% of each participating utility's peak load to become competitive each year. Full implementation would follow the three–year phase–in.

9. Legislative Issues:

Discussion:

Legislation could address the following matters depending on the electric restructuring process developed and approved by the legislature:

Amend the *used and useful* standard to clarify that the PSC could permit recovery of stranded costs.
If deemed appropriate by the Legislature, extend PSC jurisdiction under Title 58, Chapter 27, of the South Carolina Code.
Authorize the PSC to certify, license, and fine brokers, marketers and service aggregators, and to define these terms and other terms such as ancillary services, bilateral contracts, Competitive Transition Charge, electric supplier, ISO, and stranded costs.
Amend the law changing the territorial obligation to serve to an obligation of all distribution service providers to connect customers and provide distribution services.
Amend the South Carolina Tax Law as necessary to protect tax revenues.
Legislative changes to require a cash performance bond or some other requirement for generation suppliers that are not facilities based.

Proposed Implementation:

The PSC defers to the General Assembly the determination of the participants and any related procedure changes related to the jurisdiction of the Commission.

10. Commission Certification of Generation Providers:

Discussion:

Generation providers or suppliers are defined as generators, aggregators, power marketers, and others (such as cogenerators supplying excess power) that supply electricity to an electric system. The establishment of certification requirements by the PSC can contribute toward attaining reliability and adequacy of service from these providers under competition and also aid in ensuring compliance with PSC procedures and rules. Reliability refers to the technical ability to supply electricity that meets the requirements for voltage, power quality, interruptions, etc. The adequacy of electricity includes the technical and non–technical ability to ensure that a given supplier can and will supply the power to meet its commitments. Adequacy and reliability require the supplier to have financial capability; management, operational, and technical expertise; and facilities and contractual arrangements necessary to meet the needs of customers. Under electric restructuring, each supplier shall be responsible and held accountable for delivering power to the grid to fulfill its customers' requirements and to meet any customer protection requirements established by the General Assembly or the PSC. A potential supplier should not be allowed to commence operation in the state until it has

fully complied with all of the certification requirements established by the General Assembly or the PSC.

A licensing or certification process could include information on the following to determine compliance with PSC rules and procedures:

Generation capability of the supplier (owned, contracted, quality of contracts);
Quality and reliability history of the supplier, such as quantitative measures for quality performance;
Transmission processes which are acceptable to an ISO or other entity should an ISO not be established, such as voltage and output adaptation;
Management systems and contingency plans;
Expertise and experience in the technical requirements and management of services provided;
Compliance with all applicable PSC rules, procedures, and requirements;
Financial qualifications which indicate whether the supplier's financial resources are sufficient to meet its contractual obligations;
Bonding requirements for those suppliers without sufficient facilities within the state or with insufficient support data or with inadequate customer protection procedures;
Legal structures and information and copies of the types of contracts to be offered customers within the state;
Compliance with PSC customer protection procedures, including customer payment procedures, complaint resolution, marketing guidelines, customer billing procedures, etc.;
Agreements to supply power on a nondiscriminatory basis to customers;
Procedures for affiliate transactions.

Information to be filed with the PSC as part of the certification process, could include:

Legal name of the business;
Business address;
Financial information including an income statement, balance sheet and cash flow;
State of incorporation, date;
Name and business address of all officers and directors;
Name, title and telephone number of the regulatory affairs representative responsible for the resolution of customer complaints and customer service issues (it would be preferable for each supplier to have a person located in–state responsible for addressing and resolving customer complaint and customer service issues);
Summary of customer complaint history for the past two years on the basis of a format to be developed by the PSC (subject to additional informational requests by the staff of the PSC);

Description of the nature of the business, corporate structure, identification of subsidiaries and their functions;
Copy of the standard of conduct followed by the company in dealing with its customers and other parties;
Copy of the standard contract used by the company with the terms and conditions;
Disclosure of any illegal acts or certification violations with which the company has been charged over the past two years in any state or federal jurisdiction and the dispositions of any violations.

A standard or code of conduct for suppliers could include the following issues:

Provide explicit resolution procedures for resolving disputes in accordance with PSC procedures.
Identify the names, addresses, and phone numbers of parties that assist customers and the PSC staff in resolving disputes;
Procedures to handle customer deposits, in accordance with PSC regulations;
Procedures to handle customer complaints, in accordance with PSC regulations;
Provide customers with understandable and accurate information and comply with any PSC procedures regarding marketing guidelines and consumer education;
Notify and explain to customers any changes in the terms and conditions of service, or the intent to terminate the customer's service contract;
Allow customers to have access to their own historic load and bill information;
Provide nondiscriminatory service and terms and conditions of services;
Ensure confidentiality of customer payment history;
Ensure that sufficient safeguards are in place so that customers in the state are not slammed (zapped) through actions taken by the supplier or its agents;
Transfer customers from one competitive supplier to another consistent with the PSC procedures.

The burden for preventing and minimizing the slamming or zapping of customers belongs with the service provider. The PSC's role is to monitor customer complaints concerning this matter and determine the proper action to follow against violators. Some states allow their regulatory authority the ability to assess fines against those parties guilty of zapping, and against any party which violates the rules and procedures of the authority. Fines, penalties, or license revocation must be administered by the PSC after an opportunity for a hearing. The PSC must have the right to inspect the books and records of any supplier if there are questions regarding market conduct or service quality and reliability. Each supplier must provide a bond or some alternative insurance that would provide a fund against which to secure damages attributable to fraud or nonperformance. In addition, a

supplier could be required to maintain some form of physical presence within the state which must include the ability to address consumer and regulatory issues.
Proposed Implementation:

The process as discussed above should be followed within the electric restructuring process.

11. Territorial Assignment:

Discussion:

The General Assembly passed the Territorial Assignment Act in 1969 which provides for PSC assignment of service areas to electric suppliers in South Carolina. Currently in South Carolina, only the Investor Owned Utilities (IOUs) and the Distribution Electric Cooperatives, as per the Act, have been assigned service territories by the Commission for areas outside the corporate limits of municipalities and more than three hundred (300) feet (corridors) from the distribution lines of all electric suppliers as these lines existed on the dates of assignments. Certain areas throughout the state have been left unassigned where determined appropriate by public convenience and necessity. By separate statutes, the South Carolina Public Service Authority, Santee Cooper, also has service areas designated, and Santee Cooper's service areas are located mainly in the counties of Berkeley, Georgetown, and Horry.

The Code defines these *distribution lines* and provides for the rights of electric suppliers under various scenarios of multi–service provider conditions and locations of premises that occupy two or more suppliers' service right areas. There are also provisions for dispute resolution and Commission authorization to order alternative suppliers where such original suppliers' service is inadequate or undependable. The Commission can also require reasonable extensions of facilities and order reassignment of service areas when determined appropriate by public convenience and necessity.

The territorial boundaries of the participating utilities need to be maintained, as they currently exist, under an electric restructuring process. Maintaining territorial assignments would tend to make the initial steps in the restructuring process less confusing to customers and would provide a means for the PSC to maintain control, thus providing customer protection through the distribution function which might not exist with the removal of these boundaries.

Proposed Implementation:

The participating utilities or host utilities should be allowed to maintain their existing territorial assignments but such assignments should be limited to distribution and transmission services only.

12. Regulation of Transmission and Distribution Rates:

Discussion:

All parties involved in the electric industry restructuring debate envision a regulated transmission and distribution system that allows open and nondiscriminatory access to all suppliers of electricity. The following primary issues need to be addressed:

Demarcation between transmission and distribution;
Unbundling of ancillary transmission and distribution services;
Size of the transmission and distribution service area.

The demarcation between transmission and distribution could determine which agency has authority over transmission. Interstate transmission is under the jurisdiction of the Federal Energy Regulatory Commission (FERC). However, FERC asserts that all transmission flows could be interstate and therefore, under its jurisdiction. Such a determination would leave only distribution under the jurisdiction of the PSC. A less expansive determination of interstate transmission would leave intrastate transmission under the jurisdiction of the PSC. FERC has expressed a willingness to work with the states in making a determination of interstate/intrastate transmission. It may be possible to have different demarcation points for each system, if territorial assignments remain for transmission and distribution. The removal of territorial assignments could necessitate a single demarcation.

Regardless of the type of regulation to which the transmission and distribution systems are subject, the cost of providing transmission and distribution service must be determined. The most accurate cost determinations occur when the services are unbundled to the greatest extent possible. FERC requires that wholesale transmission be unbundled for six services: scheduling, system control and dispatch service; reactive supply and voltage control from generation source service; regulation and frequency response service; energy imbalance service; operating reserve, spinning reserve service; and operating reserve, supplemental reserve service. Whether the unbundled services used in determining costs should be offered for sale as unbundled services must be determined. This decision will depend upon the degree of competition for the service, the technical and practicable ability to unbundle the service, the desire to limit customer confusion, and the demand by customers for unbundled services.

If territorial assignments are retained, the rates could be based on the cost of providing transmission and distribution services by the various incumbent utilities. However, a statewide system might require single statewide rates. This would require that the PSC determine the appropriate statewide rate. Many parties have suggested regional rates which cross state boundaries. The PSC has no authority to establish rates outside of South Carolina and may not have the authority to establish statewide rates which do not reflect the actual costs of the incumbent utility for providing the transmission and distribution services.

Proposed Implementation:

The PSC should continue to regulate the distribution functions, including rates.

13. Independent System Operator (ISO):

Discussion:

Many parties have recommended that an ISO control the operation of a regional or statewide transmission and distribution system. The primary purpose of the ISO is to reliably operate the transmission systems and to ensure that all market participants have equal and nondiscriminatory access to the transmission system. An ISO could minimize the possibility of any transmission owner giving preferential treatment to itself or an affiliate. A statewide or regional transmission system may be more efficiently managed to ensure system reliability, safety, planning, and improvements by an ISO than by several transmission owners trying to coordinate their independent actions. The responsibilities of the ISO can be limited to functions, such as scheduling, balancing, planning, and operation of the transmission system, or expanded to include virtually all services related to transmission and distribution, including the function associated with a PX. All of the responsibilities of an ISO should be clearly defined before an ISO is formed.

The implementation of an intrastate ISO may be difficult for a number of reasons. Duke Energy and Carolina Power serve customers in both North and South Carolina. Each company operates its multi–state system as one integrated system that crosses state boundaries. Placing only the South Carolina portion of each company's system under the control of an ISO will not be workable without major changes in system operation.

An ISO is not a necessity for a restructured electric industry. The incumbent utilities are currently performing all of the functions in their assigned territories that an ISO would perform. Incumbent utilities also coordinate their activities to ensure the reliability and safety of the regional transmission grid. Strict enforcement of rules, statutes, and codes of conduct could prevent any self–dealing by the transmission and distribution system owners. Thus, the requirement for an ISO could result in additional bureaucracy with its associated costs while providing no improvement to system operation or efficiencies. Some parties feel that a regional, multi–state ISO would reduce the influence, authority, and control of any particular state legislature or state agency over the transmission system within its borders. However, in the absence of an ISO, movement of power through multiple transmission owners' systems will result in *rate pancaking*, that is, each transmission owner will charge for use of its individual system. Additionally, suppliers will have to submit schedules and points of receipt and delivery with each transmission owner.

Proposed Implementation:

It is important to conduct a careful analysis of the ISO process to ensure that it is properly established and implemented. Should an ISO prove to be noncost-effective or

unnecessary, it could be difficult to undo. A regional ISO offers greater potential for benefit than a state–only ISO. However, the utilities within the state are already providing the functions of an ISO, and with sufficient rules and procedures in place, along with FERC open access tariffs, electric restructuring could take place within a state without the formulation of an ISO. A regional ISO makes sense because it provides the function of matching supply and demand from more numerous suppliers and more end–users through various transmission and distribution entities while minimizing pancaking and market power potentials. It is important to realize that the use of a state or regional ISO takes transmission control away from the state and gives it to FERC, who has responsibility for transmission functions.

1. The PSC will conduct a proceeding to address the need for and the formulation and implementation of a regional ISO process, which also allows for the incorporation of bilateral contractual arrangements between customers and suppliers and the possibility of a pool process. The ISO must be an independent not–for–profit organization governed by a board of stakeholders. The development of an ISO must be consistent with any related requirements of FERC and any other relevant federal or state law. An interim process should be established if it is not possible to have an ISO in place by the beginning of the phase–in process.

2. This process recommends the following criteria for an ISO process:

A) ISO Purpose:

Ensure that the functional safety, stability, and reliability of the interconnected power system is adequately maintained and improved;
Ensure that all market participants (customers and qualified suppliers) have nondiscriminatory access to, and rates for, transmission services;
Establish and enforce procedures for system access, power quality, planning, and forecasting;
Identify where new or enhanced transmission facilities are required and recommend action to the PSC so as to avoid curtailment of bulk transfer.

B) ISO Responsibilities:

Operate to ensure maximum availability of the interconnected power system to all users on a fair and consistent basis while maintaining reliability and integrity of the system.
Identify expected transmission constraints. Collect all necessary information including:

(a) Expected electrical demand for all control areas,
(b) All power transactions involving transmission service,

(c) Generation and transmission equipment currently out of service and unavailable for service and projections of equipment planned to be taken out of service.

Assess the integrity of the system continuously in real–time.

Establish and maintain information systems required to provide any real–time data and projections necessary to accomplish responsibilities.

Coordinate and approve maintenance schedules of all transmission equipment as well as dispatching of generation deemed by the ISO to be important to the reliability and integrity of the interconnected power system;

Coordinate, and in emergencies curtail, bulk power transfers as necessary to maintain the reliability and integrity of the interconnected power system according to the ISO's curtailment plan as approved by FERC in a nondiscriminatory manner and ensuring to the greatest extent possible that all South Carolina customers receive power;

Modify the curtailment plan and submit to FERC for approval when necessary to ensure that all users of the interconnected power system have open, nondiscriminatory access to the system.

Adjust operations to mitigate transmission constraints when it is possible to do so without causing any party to incur significant incremental operating costs.

Identify potential operating changes that would mitigate transmission constraints where the incremental operating costs are significant, such as changes in generator dispatch, and communicate such potential operating changes to the marketplace through the Open Access Same–Time Information System (OASIS);

Warn transmission users, via the OASIS or other means, as early as possible that curtailments of energy transfers are likely or imminent;

Provide guidance to transmission service suppliers in event of system disturbances (such as the loss of important power system equipment) or emergency conditions such as hurricanes;

Monitor the compliance of all suppliers of energy and transmission services with applicable operating guidelines and ISO requirements and procedures.

C) Other Considerations*:*

A regional ISO is preferable to a state–specific ISO and efforts should be made to develop a regional ISO.

The ISO will not be a party to contracts for power supply or transmission supply, but will be informed of all contracts that use transmission resources in the state and will have the authority to deny or cancel transactions, if such action is necessary to maintain reliability and integrity of the power system.

Representatives from the ISO, suppliers, distribution and transmission companies, and the PSC shall meet frequently, at least monthly initially, to

discuss the operations of the electric restructuring process and specifically the coordination functions between the ISO and the other participants.

The ISO, the suppliers, and the distribution companies shall file reports with the PSC concerning service reliability and include information on problems and problem resolution.

All participants within the electric restructuring process, including the ISO process, shall abide by PSC consumer education procedures and regulations such as customer complaint procedures.

All participants in the electric restructuring process, including those within the ISO process, will provide the PSC with a monthly summary report of customer complaints in a format approved by the PSC.

The ISO proceeding could also consider the need to utilize a pool process and a PX.

14. Power Exchange (PX):

Discussion:

A PX exists for the purpose of providing all suppliers with an opportunity to bid electricity into a pool. The bids are stacked from lowest to highest price until sufficient generation is identified to meet the projected demand. The highest price bid selected in each time period becomes the market–clearing price for energy for that time period. Any customer who does not have a bilateral supply contract with an electric supplier is served from the PX at the market–clearing price. The advantages of the PX include the assurance that all customers have the opportunity to benefit from a competitive market, economic efficiency, and centralized control.

Many parties believe that a PX will not bring the benefits of competition to the customers. There is fear that any utility with sufficient generation could maneuver the PX to its advantage resulting in market power for that generating company. This is especially possible if a decision is made that nuclear generation deserves special consideration and is given *must run* status. Without a large number of generation bidders, a PX is subject to control and manipulation by a few large generating companies. However, if the PX encompasses a broad area similar to a regional ISO, no one party will be able to dominate activity. Opponents of a PX generally recommend that all generation transactions occur through bilateral contracts between suppliers and customers. A PX can accommodate bilateral contracts.

Some parties also believe that charging all customers the highest bid market–clearing price for each time period is unfair. There could be a large difference in the bid prices for any time period. Because each customer pays the highest bid market–clearing price, it is the generating companies who bid lower priced energy that benefit from the lower prices, not the consumer. These parties believe that market prices must reflect each price that was bid, not just the highest price. This would require some type of allocation of the energy that was bid among the customers. No party proposed such an allocation mechanism. It should be noted that pricing is often considered a fairness issue.

Competitive markets are based on marginal prices, which can result in lower cost producers receiving the benefit of their lower costs in the short run.

Proposed Implementation:

A PX is not required for the electric restructuring process but should be considered as part of the PSC's hearing concerning the ISO process. Its functions can be incorporated within the ISO rather than separated from the ISO.

15. Reciprocity:

Discussion:

The issue of reciprocity is very complicated, primarily because of legal considerations and practical implementation considerations. Fairness would dictate that reciprocity is required. Why should any company, assigned territory, state, or region open its system to others who do not open their system? This concept is inherently unfair.

However, once a system is opened it may be illegal to close it to those who do not open their system. The Commerce Clause seems to prohibit such reciprocity in interstate commerce as a restraint of trade. Legal problems may also restrict the application of reciprocity to purely intrastate transactions. Tax laws may prohibit utilities financed by municipal tax–free bonds from opening their systems.

It would be very difficult, if not impossible, to enforce reciprocity across state boundaries even if it were legal to do so. How do you determine the exact source of the electric generation flowing into the state? Marketers may have supply contracts with a number of generation companies having generating plants located in many different states. Which plant in which state supplied the power? Does that state have an open system? Determining the source of the power and whether or not it comes from an open system would be an administrative nightmare.

The challenge with reciprocity is to determine if it is legal and can be implemented and enforced.

Proposed Implementation:

Given the legal matters related to reciprocity, it is recommended that the General Assembly determine the extent and manner for reciprocity to apply to electric restructuring in South Carolina.

16. Unbundling:

Discussion:

It is important to define the concept of unbundling as it applies to this process and to realize that once a service is unbundled and allowed to become competitive, it will be very difficult to reverse the process. This process requires the host utilities to functionally unbundle on the basis of generation, transmission, and distribution. This means that these

functions which were bundled under regulation are to be separated with electric restructuring. It is necessary as part of the unbundling process to examine the costs that are allocated among these three major functions to ensure that the costs are proper. In addition to the broad unbundling of major utility functions, the services within these functions can also be subject to unbundling under a competitive electric restructuring process. Unbundling of services consists of separating services offered to customers; developing cost studies and rates for these services; and determining which services to make competitive as customer demand and competition develop.

During the transition period for electric restructuring, the market structure will move from the existence of only bundled regulated services provided by monopoly host utilities toward competition for specific services. Initially, generation will become competitive with other specific services going competitive as customer demand for such services increases and with the development of alternative providers of these services. The host utility will initially provide the distribution services, but some of these services can be unbundled and allowed to be competitive once sufficient competition exists.

Proposed Implementation:

The PSC will conduct a proceeding to address unbundling by the utilities on both a functional basis and on a service basis. The utilities will be required to file cost of service studies for its various functions and services, specifically distribution services. The cost of service studies will be based on a methodology established by the PSC. Rates for the unbundled services must be included in the filing.

As part of the unbundling proceeding, the utilities will file with the PSC a process for the unbundling of distribution services. The unbundling process must provide for the unbundling of distribution services on the basis of customer classes with corresponding cost studies and rates.

All interested parties should participate in this proceeding to provide input regarding the services to be unbundled, the time period for unbundling, and the unbundled rates.

Unbundled metering costs must be provided within the cost studies to provide cost information for the possible unbundling of these functions in the future.

Billing costs must be unbundled to provide cost information relevant for transferring information between parties involved in the billing function.

The unbundled services offered must be filed under tariff with the PSC. The tariff rates for competitive services are to function only as a cap on rates for the unbundled services during the phase–in and can be removed at the discretion of the PSC.

The services to be unbundled and the timetable for unbundling such services should be determined on the basis of the demand for the service and the degree of competition.

The services to be offered on an unbundled basis could be utility-specific with different services being unbundled for different utilities and for various customers and classes of customers.

The PSC should monitor unbundling for the purpose of reviewing and determining the future unbundling process.

17. Consumer Protection:

Discussion:

The issue of consumer protection must be addressed within the framework of electric restructuring. It is essential that customers be sufficiently protected given the uncertainty that they must confront within the new environment.

Proposed Implementation:

The following is a partial list of standards, which should be followed to provide consumer protection:

Nondiscriminatory application of all tariffs;

Processing of all requests for service in a reasonable and similar manner;

Avoidance of preferential treatment of any service supplier or its customers in matters relating to obtaining service, movement of electricity, administering of contracts, and settling of disputes;

No utility may give preference to the selection, allocation, or releasing of transmission capacity;

Neither the incumbent utility nor any affiliated generation supplier may represent that it has any advantage in the use of the distribution or transmission system;

The incumbent utility and its non–regulated subsidiaries will be prohibited from joint marketing calls and joint promotions;

The incumbent utility must be prohibited from providing sales leads to an alternate service supplier or referring any customer to an alternate service supplier;

The incumbent utility must contemporaneously disclose nonconfidential information concerning customers or potential customers to all potential suppliers;

The incumbent utility may not disclose to any alternate service supplier confidential information obtained in connection with providing transmission, distribution, ancillary, or customer services;

Employees of the transmission and distribution companies should be physically separated to the fullest extent reasonably possible and must function independently of a generator, marketer, broker, aggregator, or other type of service supplier that is an affiliate of the transmission or distribution company;

The incumbent utility must maintain separate books of accounts and records for non–regulatory affiliates;
There can be no cross–subsidization between regulated companies and their non-regulated affiliated companies; and,
Suppliers must file with the PSC procedures that will enable the PSC to determine how the utility is complying with these standards.

In addition to the items listed above, Section 10 – "Commission Certification of Generation Providers" and Section 7 – "Slamming," contain additional consumer protection criteria which should be adopted as part of this process.

The PSC can modify these standards and develop a more comprehensive list during its proceeding on electric restructuring. It is essential that the PSC staff have computer access to pertinent consumer information available at the utility. The utilities must provide the staff with access to this information in a manner agreeable to staff and the company.

Existing PSC billing requirements should be maintained and reviewed to determine whether they should be modified under electric restructuring. Billing regulations dictate the information on the bill, billing frequency, maintenance of billing records, and how payments are handled. Customers must know and understand how much they are paying and for what services they are paying. Billing providers under the PSC process must comply with the PSC's rules and procedures regarding billing.

PSC rules and procedures on deposits should be applicable under restructuring. Deposits function as security against non–payment to the service provider. Fair and equitable deposit requirements also protect customers and need to continue to be regulated by the PSC. Termination of customer service is an important issue, and PSC regulations need to continue to apply. Risks to the customer related to loss of electric service are very high. For example, personal harm can occur with loss of heating service during the winter.

The most important consumer protection function exists with the role of consumer complaints. The PSC's complaint procedures must remain in effect and apply fully under this process for electric restructuring. Under a restructured and unbundled electric industry, the PSC will have jurisdiction over all customer complaints regarding rates charged for distribution and related services, billing for distribution and related services, distribution service providers' interfaces with customers, and behavior by suppliers inconsistent with the PSC's standards of conduct and certification and licensing requirements. Customers must have the continued guarantee that their complaints related to companies providing electric services can be handled effectively. Some customers may not know who to contact to resolve service problems or to address specific complaints. Customer education should be established to protect consumers, not to provide marketing opportunities for competitors, and should be under the direction of the PSC. Responsibility for initial customer contacts should be assigned to the local distribution company to ensure that those contacts are uniformly and effectively addressed. The distribution company has the responsibility to provide the customer with

the information needed to pursue a complaint or an issue with the PSC or any participant in the electric restructuring process. The PSC's proceeding on restructuring can establish a complete consumer protection process. The implementation of a consumer protection process will also involve the revision of the South Carolina Code of Laws relating to electric utility regulations and the PSC's applicable rules and procedures.

CONCLUSION

The Commission offers no judgment as to necessity or advisability of implementing electric industry restructuring at this time. We believe the current system is working well and before any decision to make monumental changes is made, there are major issues and questions that should be resolved so that all South Carolinians benefit. Therefore, we believe deliberate and careful analysis of existing issues and other states' experiments will ensure the public interest is served.

Electricity is a service that uniquely affects the public interest. Reliable and affordable electric service is critical to the well–being of all South Carolina citizens and businesses. Any attempt to radically alter the present generation, transmission and distribution systems, if in fact, significant changes are necessary, should not be undertaken without a thorough understanding of the implications to existing and future customers, whether they are large businesses or residential customers in South Carolina.

Although this process provides for review of the stranded cost issues during the initial two–year period after passage of legislation, the Commission is of the opinion that such a review should be conducted prior to a final decision being made that restructuring is in the public interest. The amount of stranded cost to be recovered can have a tremendous impact on the advisability of implementing restructuring.

Also, the Commission is concerned about the possible tax consequences and implications. This is also an issue which we believe would be better resolved prior to making any final determination as to the feasibility and advisability of implementing a restructuring program.

The Commission has set forth its recommendation regarding billing for transmission, distribution and generation services. The recommendation in this process will result in the customer receiving two bills. The Commission is aware that customers generally do not want two bills. However, at this time, we do not have an alternative which will be suitable to all those concerned. It would be helpful if an arrangement can be made so that the customer receives only one bill. This could and should be further examined during the initial two–year period or during the transition period.

This process seeks to provide a means to address the many complex issues related to restructuring the electric industry. While this process identifies many issues which accompany the restructuring of the electric industry, it cannot identify or address all of the issues which will arise as a result of a restructuring. Implementation of any process of restructuring will more than likely raise additional issues which are not discussed herein.

Thus, an orderly planning process which is flexible and dynamic and which allows for modifications as restructuring develops cannot be overemphasized.

South Carolina is not facing a crisis with regards to electric rates or potential loss of an economic investment. In fact, we are in an enviable position regarding rates and investment. Thus, a realistic approach for South Carolina to take at this time is to proceed with caution by obtaining answers to the complex issues raised in this document. South Carolina's reliable, low–cost electric industry could be compromised for the sake of short–term gains. Important lessons can be learned from other restructuring experiments such that mistakes made by others are not duplicated in South Carolina.

Respectfully submitted,

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Guy Butler, Chairman	Philip T. Bradley , Vice–Chairman
_____	_____
William T. Saunders, Commissioner	C. Dukes Scott, Commissioner
_____	_____
Cecil A. Bowers, Commissioner	Warren D. Arthur, IV, Commissioner
_____	
Rudolph Mitchell, Commissioner	